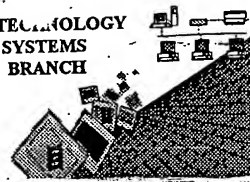


BEST AVAILABLE COPY

BIOTECHNOLOGY
SYSTEMS
BRANCH



0570
0508

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

10/002,784

Source:

OIP

Date Processed by STIC:

5/9/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER** VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
4. U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
5. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



Does Not Comply
Corrected Diskette Needed

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/002,784

DATE: 05/09/2002
TIME: 14:08:51

Input Set : A:\Sequence.txt
Output Set: N:\CRF3\05092002\J002784.raw

delete
W--> 3 /33
9 <110> APPLICANT: Ulrich, Robert G.
11 <120> TITLE OF INVENTION: Bacterial Superantigen Vaccines
13 <130> FILE REFERENCE: 003/233/SAP
15 <140> CURRENT APPLICATION NUMBER: 10/002,784
C--> 17 <141> CURRENT FILING DATE: 2002-04-23
19 <150> PRIOR APPLICATION NUMBER: 08/882,431; 09/144,776
W--> 21 <151> PRIOR FILING DATE: 97-06-25; 98-09-01
23 <160> NUMBER OF SEQ ID NOS: 40
25 <170> SOFTWARE: Apple Macintosh Microsoft Word 6.0

ERRORED SEQUENCES

856 <210> SEQ ID NO: 17 *nos. differ*
858 <211> LENGTH: 28
859 <212> TYPE: DNA
860 <213> ORGANISM: Artificial sequence
W--> 861 <220> FEATURE: *ok*
862 <223> OTHER INFORMATION: primer
E--> 863 <400> SEQUENCE: 18
865 ctcgcaagag gtacatatgc aacaagac 28
1121 <210> SEQ ID NO: 26
1123 <211> LENGTH: 220
1124 <212> TYPE: PRT
1125 <213> ORGANISM: Artificial sequence
W--> 1126 <220> FEATURE:
1127 <223> OTHER INFORMATION: mutant streptococcal pyrogenic exotoxin-A
W--> 1128 <400> SEQUENCE: 26
1130 Met Gln Gln Asp Pro Asp Pro Ser Gln Leu
1131 5 10
1132 His Arg Ser Ser Leu Val Lys Asn Leu Gln
1133 15 20
1134 Asn Ile Tyr Phe Leu Tyr Glu Gly Asp Pro
1135 25 30
1136 Val Thr His Glu Asn Val Lys Ser Val Asp
1137 35 40
1138 Gln Leu Arg Ser His Asp Leu Ile Tyr Asn
1139 45 50
1140 Val Ser Gly Pro Asn Tyr Asp Lys Leu Lys
1141 55 60
1142 Thr Glu Leu Lys Asn Gln Glu Met Ala Thr
1143 65 70

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,784

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TIME: 14:08:51

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

1144 Leu Phe Lys Asp Lys Asn Ile Asp Ile Tyr
 1145 75 80
 1146 Gly Val Glu Tyr Tyr His Leu Cys Tyr Leu
 1147 85 90
 1148 Cys Glu Asn Ala Glu Arg Ser Ala Cys Ile
 1149 95 100
 1150 Gly Gly Val Thr Asn Arg Glu Gly Asn His
 E--> 1151 105 100 → 110
 1152 Leu Glu Ile Pro Lys Lys Ile Val Val Lys
 1153 115 120
 1154 Val Ser Ile Asp Gly Ile Gln Ser Leu Ser
 1155 125 130
 1156 Phe Asp Ile Glu Thr Asn Lys Lys Met Val
 1157 135 140
 1158 Thr Ala Gln Glu Leu Asp Tyr Lys Val Arg
 1159 145 150
 1160 Lys Tyr Leu Thr Asp Asn Lys Gln Leu Tyr
 1161 155 160
 1162 Thr Asn Gly Pro Ser Lys Tyr Glu Thr Gly
 1163 165 170
 1164 Tyr Ile Lys Phe Ile Pro Lys Asn Lys Glu
 1165 175 180
 1166 Ser Phe Trp Phe Asp Phe Phe Pro Glu Pro
 1167 185 190
 1168 Glu Phe Thr Gln Ser Lys Tyr Leu Met Ile
 1169 195 200
 1170 Tyr Lys Asp Asn Glu Thr Leu Asp Ser Asn
 1171 205 210
 1172 Thr Gln Ile Glu Val Tyr Leu Thr Thr Lys
 1173 215 220
 1324 <210> SEQ ID NO: 32
 1326 <211> LENGTH: 82
 1327 <212> TYPE: PRT
 1328 <213> ORGANISM: staphylococcal enterotoxin A
 1329 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
 E--> 1330 <400> SEQUENCE: 32
 1332 Ser His Asp Gln Phe Leu Gln His Thr Ile
 1333 5 10
 1334 Leu Phe Lys Gly Phe Phe Thr Asp His Ser
 1335 15 20
 1336 Trp Tyr Asn Asp Leu Leu Val Asp Phe Asp
 1337 25 30
 1338 Ser Lys Asp Ile Val Asp Lys Tyr Lys Gly
 1339 35 40
 1340 Lys Lys Val Asp Leu Tyr Gly Ala Tyr Tyr
 1341 45 50
 1342 Gly Tyr Gln Cys Ala Gly Gly Thr Pro Asn
 1343 55 60
 1344 Lys Thr Ala Cys Met Tyr Gly Gly Val Thr

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

Error: 22207 is mandatory when
 22237 is present per Sect. 1.823
 of the New Rule

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/10/002,784

TIME: 14:08:51

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

```

1345          65          70
1346 Leu His Asp Asn Asn Arg Leu Thr Glu Glu
1347          75          80
1348 Lys Lys
1350 <210> SEQ ID NO: 33
1352 <211> LENGTH: 82
1353 <212> TYPE: PRT
1354 <213> ORGANISM: staphylococcal enterotoxin D
1355 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1356 <400> SEQUENCE: 33
1358 Thr Gly Asp Gln Phe Leu Glu Asn Thr Leu
1359          5          10
1360 Leu Tyr Lys Lys Phe Phe Thr Asp Leu Ile
1361          15          20
1362 Asn Phe Glu Asp Leu Leu Ile Asn Phe Asn
1363          25          30
1364 Ser Lys Glu Met Ala Gln His Phe Lys Ser
1365          35          40
1366 Lys Asn Val Asp Val Tyr Pro Ile Arg Tyr
1367          45          50
1368 Ser Ile Asn Cys Tyr Gly Gly Glu Ile Asp
1369          55          60
1370 Arg Thr Ala Cys Thr Tyr Gly Gly Val Thr
1371          65          70
1372 Pro His Glu Gly Asn Lys Leu Lys Glu Arg
1373          75          80
1374 Lys Lys
1377 <210> SEQ ID NO: 34
1379 <211> LENGTH: 82
1380 <212> TYPE: PRT
1381 <213> ORGANISM: staphylococcal enterotoxin E
1382 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1383 <400> SEQUENCE: 34
1385 Ser Asp Asp Gln Phe Leu Glu Asn Thr Leu
1386          5          10
1387 Leu Phe Lys Gly Phe Phe Thr Gly His Pro
1388          15          20
1389 Trp Tyr Asn Asp Leu Leu Val Asp Leu Gly
1390          25          30
1391 Ser Lys Asp Ala Thr Asn Lys Tyr Lys Gly
1392          35          40
1393 Lys Lys Val Asp Leu Tyr Gly Ala Tyr Tyr
1394          45          50
1395 Gly Tyr Gln Cys Ala Gly Gly Thr Pro Asn
1396          55          60
1397 Lys Thr Ala Cys Met Tyr Gly Gly Val Thr
1398          65          70
1399 Leu His Asp Asn Asn Arg Leu Thr Glu Glu
1400          75          80

```

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/10/002,784

TIME: 14:08:51

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

```

1401 Lys Lys
1403 <210> SEQ ID NO: 35
1405 <211> LENGTH: 89
1406 <212> TYPE: PRT
1407 <213> ORGANISM: staphylococcal enterotoxin B
1408 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1409 <400> SEQUENCE: 35
1411 Ser Ile Asp Gln Phe Leu Tyr Phe Asp Leu
1412                               5          10
1413 Ile Tyr Ser Ile Lys Asp Thr Lys Leu Gly
1414                               15          20
1415 Asn Tyr Asp Asn Val Arg Val Glu Phe Lys
1416                               25          30
1417 Asn Lys Asp Leu Ala Asp Lys Tyr Lys Asp
1418                               35          40
1419 Lys Tyr Val Asp Val Phe Gly Ala Asn Tyr
1420                               45          50
1421 Tyr Gln Cys Tyr Phe Ser Lys Lys Thr Asn
1422                               55          60
1423 Asp Ile Asn Ser His Gln Thr Asp Lys Arg
1424                               65          70
1425 Lys Thr Cys Met Tyr Gly Gly Val Thr Glu
1426                               75          80
1427 His Asn Gly Asn Gln Leu Asp Lys Tyr
1428                               85
1430 <210> SEQ ID NO: 36
1432 <211> LENGTH: 89
1433 <212> TYPE: PRT
1434 <213> ORGANISM: staphylococcal enterotoxin C1
1435 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1436 <400> SEQUENCE: 36
1438 Ser Val Asp Lys Phe Leu Ala His Asp Leu
1439                               5          10
1440 Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys
1441                               15          20
1442 Asn Tyr Asp Lys Val Lys Thr Glu Leu Leu
1443                               25          30
1444 Asn Glu Gly Leu Ala Lys Lys Tyr Lys Asp
1445                               35          40
1446 Glu Val Val Asp Val Tyr Gly Ser Asn Tyr
1447                               45          50
1448 Tyr Val Asn Cys Tyr Phe Ser Ser Lys Asp
1449                               55          60
1450 Asn Val Gly Lys Val Thr Gly Gly Lys Thr
1451                               65          70
1452 Cys Met Tyr Gly Gly Ile Thr Lys His Glu
1453                               75          80
1454 Gly Asn His Phe Asp Asn Gly Asn Leu
1455                               85

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,784

DATE: 05/09/2002

TIME: 14:08:51

Input Set : A:\Sequence.txt.

Output Set: N:\CRF3\05092002\J002784.raw

```

1457 <210> SEQ ID NO: 37
1459 <211> LENGTH: 89
1460 <212> TYPE: PRT
1461 <213> ORGANISM: staphylococcal enterotoxin C2
1462 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1463 <400> SEQUENCE: 37
1465 Ser Val Asp Lys Phe Leu Ala His Asp Leu
1466                      5                      10
1467 Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys
1468                      15                      20
1469 Asn Tyr Asp Lys Val Lys Thr Glu Leu Leu
1470                      25                      30
1471 Asn Glu Asp Leu Ala Lys Lys Tyr Lys Asp
1472                      35                      40
1473 Glu Val Val Asp Val Tyr Gly Ser Asn Tyr
1474                      45                      50
1475 Tyr Val Asn Cys Tyr Phe Ser Ser Lys Asp
1476                      55                      60
1477 Asn Val Gly Lys Val Thr Gly Gly Lys Thr
1478                      65                      70
1479 Cys Met Tyr Gly Gly Ile Thr Lys His Glu
1480                      75                      80
1481 Gly Asn His Phe Asp Asn Gly Asn Leu
1482                      85
1484 <210> SEQ ID NO: 38
1486 <211> LENGTH: 89
1487 <212> TYPE: PRT
1488 <213> ORGANISM: staphylococcal enterotoxin C3
1489 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1490 <400> SEQUENCE: 38
1492 Ser Val Asp Lys Phe Leu Ala His Asp Leu
1493                      5                      10
1494 Ile Tyr Asn Ile Ser Asp Lys Lys Leu Lys
1495                      15                      20
1496 Asn Tyr Asp Lys Val Lys Thr Glu Leu Leu
1497                      25                      30
1498 Asn Glu Asp Leu Ala Lys Lys Tyr Lys Asp
1499                      35                      40
1500 Glu Val Val Asp Val Tyr Gly Ser Asn Tyr
1501                      45                      50
1502 Tyr Val Asn Cys Tyr Phe Ser Ser Lys Asp
1503                      55                      60
1504 Asn Val Gly Lys Val Thr Gly Gly Lys Thr
1505                      65                      70
1506 Cys Met Tyr Gly Gly Ile Thr Lys His Glu
1507                      75                      80
1508 Gly Asn His Phe Asp Asn Gly Asn Leu
1509                      85
1511 <210> SEQ ID NO: 39

```

RAW SEQUENCE LISTING

DATE: 05/09/2002

PATENT APPLICATION: US/10/002,784

TIME: 14:08:51

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

```

1513 <211> LENGTH: 79
1514 <212> TYPE: PRT
1515 <213> ORGANISM: streptococcal pyrogenic enterotoxin a
1516 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1517 <400> SEQUENCE: 39
1519 Ser Val Asp Gln Leu Leu Ser His Asp Leu
1520                      5                      10
1521 Ile Tyr Asn Val Ser Gly Pro Asn Tyr Asp
1522                      15                      20
1523 Lys Leu Lys Thr Glu Leu Lys Asn Gln Glu
1524                      25                      30
1525 Met Ala Thr Leu Phe Lys Asp Lys Asn Val
1526                      35                      40
1527 Asp Ile Tyr Gly Val Glu Tyr Tyr His Leu
1528                      45                      50
1529 Cys Tyr Leu Cys Glu Asn Ala Glu Arg Ser
1530                      55                      60
1531 Ala Cys Ile Tyr Gly Gly Val Thr Asn His
1532                      65                      70
1533 Glu Gly Asn His Leu Glu Ile Pro Lys
1534                      75
1536 <210> SEQ ID NO: 40
1538 <211> LENGTH: 73
1539 <212> TYPE: PRT
1540 <213> ORGANISM: toxin shock syndrome toxin-1
1541 <223> OTHER INFORMATION: partial sequence as shown in Figure 3
E--> 1542 <400> SEQUENCE: 40
1544 Val Leu Asp Asn Ser Leu Gly Ser Met Arg
1545                      5                      10
1546 Ile Lys Asn Thr Asp Gly Ser Ile Ser Leu
1547                      15                      20
1548 Ile Ile Phe Pro Ser Pro Tyr Tyr Ser Pro
1549                      25                      30
1550 Ala Phe Thr Lys Gly Glu Lys Val Asp Leu
1551                      35                      40
1552 Asn Thr Lys Arg Thr Lys Lys Ser Gln His
1553                      45                      50
1554 Thr Ser Glu Gly Thr Tyr Ile His Phe Gln
1555                      55                      60
1556 Ile Ser Gly Val Thr Asn Thr Glu Lys Leu
1557                      65                      70
1558 Pro Thr Pro

```

VERIFICATION SUMMARY

DATE: 05/09/2002

PATENT APPLICATION: US/10/002,784

TIME: 14:08:52

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

L:3 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:21 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:32 M:283 W: Missing Blank Line separator, <220> field identifier
L:34 M:283 W: Missing Blank Line separator, <400> field identifier
L:64 M:283 W: Missing Blank Line separator, <220> field identifier
L:66 M:283 W: Missing Blank Line separator, <400> field identifier
L:126 M:283 W: Missing Blank Line separator, <220> field identifier
L:128 M:283 W: Missing Blank Line separator, <400> field identifier
L:155 M:283 W: Missing Blank Line separator, <220> field identifier
L:214 M:283 W: Missing Blank Line separator, <220> field identifier
L:216 M:283 W: Missing Blank Line separator, <400> field identifier
L:267 M:283 W: Missing Blank Line separator, <220> field identifier
L:269 M:283 W: Missing Blank Line separator, <400> field identifier
L:331 M:283 W: Missing Blank Line separator, <220> field identifier
L:333 M:283 W: Missing Blank Line separator, <400> field identifier
L:384 M:283 W: Missing Blank Line separator, <220> field identifier
L:386 M:283 W: Missing Blank Line separator, <400> field identifier
L:448 M:283 W: Missing Blank Line separator, <220> field identifier
L:450 M:283 W: Missing Blank Line separator, <400> field identifier
L:494 M:283 W: Missing Blank Line separator, <220> field identifier
L:496 M:283 W: Missing Blank Line separator, <400> field identifier
L:552 M:283 W: Missing Blank Line separator, <220> field identifier
L:583 M:283 W: Missing Blank Line separator, <220> field identifier
L:585 M:283 W: Missing Blank Line separator, <400> field identifier
L:641 M:283 W: Missing Blank Line separator, <220> field identifier
L:643 M:283 W: Missing Blank Line separator, <400> field identifier
L:680 M:283 W: Missing Blank Line separator, <220> field identifier
L:682 M:283 W: Missing Blank Line separator, <400> field identifier
L:744 M:283 W: Missing Blank Line separator, <220> field identifier
L:746 M:283 W: Missing Blank Line separator, <400> field identifier
L:800 M:283 W: Missing Blank Line separator, <220> field identifier
L:802 M:283 W: Missing Blank Line separator, <400> field identifier
L:861 M:283 W: Missing Blank Line separator, <220> field identifier
L:863 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:17 differs:18
L:863 M:283 W: Missing Blank Line separator, <400> field identifier
L:872 M:283 W: Missing Blank Line separator, <220> field identifier
L:874 M:283 W: Missing Blank Line separator, <400> field identifier
L:883 M:283 W: Missing Blank Line separator, <220> field identifier
L:885 M:283 W: Missing Blank Line separator, <400> field identifier
L:894 M:283 W: Missing Blank Line separator, <220> field identifier
L:896 M:283 W: Missing Blank Line separator, <400> field identifier
L:905 M:283 W: Missing Blank Line separator, <220> field identifier
L:907 M:283 W: Missing Blank Line separator, <400> field identifier
L:917 M:283 W: Missing Blank Line separator, <220> field identifier
L:919 M:283 W: Missing Blank Line separator, <400> field identifier
L:928 M:283 W: Missing Blank Line separator, <220> field identifier
L:930 M:283 W: Missing Blank Line separator, <400> field identifier

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/002,784

DATE: 05/09/2002

TIME: 14:08:52

Input Set : A:\Sequence.txt

Output Set: N:\CRF3\05092002\J002784.raw

L:976 M:283 W: Missing Blank Line separator, <220> field identifier
L:978 M:283 W: Missing Blank Line separator, <400> field identifier
L:1066 M:283 W: Missing Blank Line separator, <220> field identifier
L:1068 M:283 W: Missing Blank Line separator, <400> field identifier
L:1126 M:283 W: Missing Blank Line separator, <220> field identifier
L:1128 M:283 W: Missing Blank Line separator, <400> field identifier
L:1151 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:26
L:1330 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:32
L:1356 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:33
L:1383 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:34
L:1409 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:35
L:1436 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:36
L:1463 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:37
L:1490 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:38
L:1517 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:39
L:1542 M:200 E: Mandatory Header Field missing, <220> not found for SEQ ID#:40